

ETS UV Water Treatment Systems by Neptune Benson

The ETS UV Systems are “medium pressure” as research has shown this type of UV to be most effective in destroying chloramines and disinfecting. Medium pressure UV Systems consume and transfer to the water somewhere between 10 and 20 times more energy than other forms of UV and are more effective at breaking apart the chemical bonds of chloramines. These UV systems have CSA, UL and NSF 50 approvals. Cryptosporidium and Giardia are common chlorine resistant pathogens quickly destroyed by high doses of UV making this a good secondary treatment as it aids rapid disinfection. There also seems to be some coagulation making filtration more effective.

UV treatment normally takes place after filtration, but before heating and chemical treatment in a chamber plumbed into the pool return line and designed to take full pool flow, so all water is treated with each pass.

The benefits of UV as secondary water treatment are the improvement in water quality resulting from continuous destruction of chloramines, and the corresponding improvement in air quality. There is also a fast kill of chlorine resistant pathogens, and some improvement in filter efficiency.

UV Systems come as packages. The actual UV chamber, which gets plumbed into a bypass pool return line (so it can be isolated for service), the electrical control panel, and the in line strainer (to capture any glass should the quartz tube surrounding a light bulb break).

The new generation of ETS UV Treatment Systems with the Spectra Touch Control Panel have several unique features. First they are validated systems, meaning that part of the CSA/NSF/CET inspection process is actually testing and proving that the UV output measured is accurate. The new ETS Spectra Touch screen, combined with the Thyristor based lamp power will produce a unit that out performs all the others in the marketplace. The new ETS unit will be programmable to hold a dose set-point, the thyristor based power can be ramped up and down in tiny increments to make this possible, where transformer based power supplies cannot. A slightly oversized unit can be programmed to hold the exact set-point and make small changes over time to hold that set-point as the lamp ages, until lamp life ends. This is like having automatic power savings because dose can be accurately matched to flow, and extends lamp life as well. The new Spectra Touch control panel will also be Internet capable and have data logging built in.



SPECTRA TOUCH CONTROL PANEL



MODEL ECF



MODEL ECP

Pipe Sz.	Model #	Lamp,	Power Req.	Flow	Price
2 1/2"	ECP-110-4SP	1.0kw x 1	208/220V 1ph	114	\$POR
3"	ECP-113-5SPV	1.3kw x 2	220V 1 ph***	176	\$POR
4"	ECF-210-4V	1.0kw x 2	208/220V 1ph	350	\$POR
6"	ECF-215-6V	1.5kw x 2	220V 1ph***	580	\$POR
6"	ECF-215-6V	1.5kw x 2	480V 3ph*	580	\$POR
8"	ECF-220-8V	2.0kw x 2	480V 3ph*	930	\$POR
10"	ECF-225-10V	2.5kw x 2	480V 3ph*	1230	\$POR
12"	ECF-230-12V	3.0kw x 2	480V 3ph*	1680	\$POR
12"	ECF-430-12V	3.0kw x 4	480V 3ph**	3350	\$POR
16"	SX-635-16V	3.5 kw x 6	480V 3ph*	7000	\$POR

Note: 1* Add on \$1150.00 for 208V or 240V; add on \$785.00 for 575V power.

Note: 2** Add on \$1575.00 for 208V or 240V; add on 1150.00 for 575V

Note: 3*** Add on \$358.50 for 208V.

Note: 4 Standard cable length from UV chamber to control panel is 15' Other lengths available, please specify with order. Cost is \$30.00/foot.

For Larger Sizes and Flows Please Enquire.

Note: A quartz tube separates the lamp from the water. Glass is not used because UV will not pass through glass.

Note: The Seal kit contains; Quartz sleeve seals for 4 seal changes, end cap seals, UV monitor seals, wiper blades, wiper shaft seals, wiper drive belt, and main flange gaskets.

2 MECHANICAL EQUIPMENT

ETS Replacement Lamps, Sleeves, & Seal Kits

Model #	Lamp	Price	Sleeve	Price	Seal Kit	Price
ECP-110-4	1501095	\$729.15	2019995	\$80.65	ECF-SK1	\$349.45
ECP-113-5	1501200	\$769.45	2020100	\$94.10	ECF-SK1	"
ECP-110-4SP	1501095	\$729.15	2019995	\$80.65	ECF-SK1	"
ECP-113-5SP	1501200	\$769.45	2020100	\$94.10	ECF-SK1	"
ECF-210-4	1501095	\$729.15	2019995	\$80.65	ECF-SK2	\$470.45
ECF-215-6 220V	1501222	\$1219.25	2020115	\$228.50	ECF-SK2	"
ECF-215-6 480V	1501220	\$1219.25	2020115	"	ECF-SK2	"
ECF-220-6	1501300	\$1303.75	2020200	\$278.95	ECF-SK2	"
ECF-220-8	1501300	"	2020200	"	ECF-SK2	"
ECF-225-8	1501400	\$1407.85	2020290	\$332.65	ECF-SK2	"
ECF-225-10	1501400	"	2020290	"	ECF-SK2	"
ECF-230-10	1501415	\$1522.08	2020355	\$369.65	ECF-SK2	"
ECF-425-10	1501400	\$1407.85	2020290	\$332.65	ECF-SK4	\$665.35
ECF-230-12	1501415	\$1522.08	2020355	\$369.65	ECF-SK2	\$470.45
ECF-233-12	1501430	\$1659.85	2020550	\$413.35	ECF-SK2	\$470.45
ECF-430-12	1501415	\$1552.08	2020355	\$369.65	ECF-SK4	\$665.35
ECF-233-14	1501430	\$1659.85	2020550	\$413.35	ECF-SK2	\$470.45
ECF-433-14	1501430	"	2020550	"	ECF-SK4	\$665.35
SX-635-16V	1001051	\$1700.75	2100284	\$1310.75	SX-SK16	\$887.65
SP-13-4	1501205	\$1256.65	2100240	\$1092.00	SP-SK4	\$359.55
SP-25-4	1501405	\$1451.55	2100270	\$1317.15	SP-SK4	"
SP-25-4S	1501405	"	2100270	"	SP-SK4	"
SP-25-6	1501405	"	2100270	"	SP-SK6	\$369.60
SP-25-8	1501405	"	2100290	\$1340.65	SP-SK8	\$406.65
SP-50-8	1501902	\$1784.25	2100295	\$1706.95	SP-SK8	"
SP-50-10	1501902	"	2100295	"	SP-SK10	\$480.48
Wiper Blade for SP Units, 49 MM Dia		\$104.10				
Wiper Blade for EC Units, 35 MM Dia		\$104.10				
ATGW2900320	Top Hat Sensor Window		20 x 5 x 20 mm			\$330.85

The use of Generic, or non-OEM lamps or other parts has the following adverse effects on ETS UV Systems: ETS Warranty is voided: NSF 50 approval is voided: Third party validation is voided: Electrical approvals are voided.